

Serial No. 10/764,290
Atty. Doc. No. 2001P10197WOUS

Amendments to the Claims:

Please amend the claims as shown. Applicants reserve the right to pursue any canceled claims at a later date.

1. (currently amended) A pre-mix burner for mixing combustion air with fuel to form a combustion gas mixture and subsequent combustion of the combustion gas mixture comprising:

a main burner adapted to receive the greater part of the combustion air; and
a pilot burner adapted to stabilize a lean combustion in the main burner, wherein the pilot burner is a pore burner with a combustion material that has a fine-pore structure having a gas lance located before the combustion material that provides a throughway for fuel to flow to the pilot burner.

2. (currently amended) The A pre-mix burner in accordance with Claim 1, wherein the fine-pore structure is formed by the foaming of the combustion material.

3. (currently amended) The A pre-mix burner in accordance with Claim 1 , wherein the combustion material is ceramic.

4. (currently amended) The A pre-mix burner in accordance with Claim 3, wherein the combustion material comprises Zirconium Oxide or Silicon Carbide.

5. (currently amended) The A pre-mix burner in accordance with Claim 1, wherein the combustion material is a Nickel or Cobalt based super alloy.

6. (currently amended) The A pre-mix burner in accordance with Claim 1, wherein the combustion material is a highly heat-resistant steel.

7. (currently amended) The A pre-mix burner in accordance with claim 1, further comprising: a ring channel for the combustion air of the main burner that surrounds the pilot burner.

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8. (currently amended) A gas turbine, comprising:
a pre-mix burner, the pre-mix burner comprising:
a main burner adapted to receive the greater part of the combustion air; and
a pilot burner adapted to stabilize a lean combustion in the main burner, wherein the pilot burner is embodied as a pore burner with a combustion material that has a fine-pore structure and having a channel for assisting routing of a fuel.
9. (currently amended) The A gas turbine in accordance with Claim 8, further comprising a ring-shaped combustion chamber.
10. (currently amended) A method for operating a pre-mix burner, comprising:
mixing combustion air with fuel to receive a combustion gas mixture, whereby the mixing is performed by a main burner; and
burning the combustion gas mixture the combustion being stabilized in the main burner by a pilot burner, wherein a combustion reaction takes place in the pilot burner with in a fine-pore combustion material and having a pilot fuel channel located upstream of the combustion material.
11. (currently amended) The A method in accordance with Claim 10, wherein the pre-mix burner comprises: a main burner adapted to receive the greater part of the combustion air; and a pilot burner adapted to stabilize a lean combustion in the main burner, wherein the pilot burner is a pore burner with a combustion material that has a fine-pore structure.
12. (currently amended) The A pre-mix burner in accordance with Claim 2, wherein the combustion material is ceramic.
13. (currently amended) The A pre-mix burner in accordance with Claim 2, wherein the combustion material is a Nickel or Cobalt based super alloy.

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14. (currently amended) The A pre-mix burner in accordance with Claim 2, wherein the combustion material is a highly heat-resistant steel.

15. (currently amended) The A pre-mix burner in accordance with claim 2, further comprising: a ring channel for the combustion air of the main burner that surrounds the pilot burner.

16. (currently amended) The A gas turbine in accordance with Claim 8, wherein the gas turbine is a stationary gas turbine